

What is claimed is

1. A catalytic body fixing structure for fixing a catalytic body to an exhaust pipe, the exhaust pipe for serving as part of an exhaust system of an engine, comprising:

a catalytic body having a generally cylindrical case made of a material different from the exhaust pipe and housed in the exhaust pipe; and

a bracket made of the same material as the exhaust pipe, said bracket being welded to an inner circumferential surface of the exhaust pipe and crimped on the generally cylindrical case of said catalytic body.

2. The catalytic body fixing structure according to claim 1, wherein said catalytic body has a generally cylindrical catalyst support for allowing an exhaust gas to flow therethrough, the cylindrical catalyst support being housed in the cylindrical case and having an end disposed inwardly of an end of said cylindrical case, said bracket being crimped on the end of the cylindrical case in a region projecting from the end of the cylindrical catalyst support.

3. The catalytic body fixing structure according to claim 1, wherein the exhaust pipe is made of titanium, and the cylindrical case and the catalyst support of the catalytic body are made of stainless steel.

4. The catalytic body fixing structure according to claim 3, wherein the bracket is made of titanium.

5. The catalytic body fixing structure according to claim 1, wherein the bracket includes a large ring fitted in a larger-diameter portion of the exhaust pipe in surrounding

relation to an end of the cylindrical case, a small ring contiguous to the large ring with the end of the case being fitted in the small ring, and a plurality of circumferentially equally spaced extension arms extending from the small ring in a direction opposite to the large ring, said plurality of extension arms being crimped on the cylindrical case.

6. The catalytic body fixing structure according to claim 5, wherein the larger-diameter portion of the exhaust pipe has a plurality of circumferentially spaced through holes provided therein so as to face an outer circumferential surface of the large ring, said large ring being welded to the larger diameter portion of the exhaust pipe at the through holes.

7. The catalytic body fixing structure according to claim 6, wherein a ring including a stainless mesh is spot-welded to the outer surface of the end of the cylindrical case opposite to the bracket, the ring being interposed between the larger-diameter portion of the exhaust pipe and the end of the cylindrical case opposite to the bracket, said ring allowing the end of the cylindrical case opposite to the bracket to slide by way of thermal expansion.

8. A catalytic body fixing structure for fixing a catalytic body to an exhaust pipe the exhaust pipe for serving as part of an exhaust system of an engine, comprising:

a catalytic body having a generally cylindrical case made of a material different from the exhaust pipe and housed in the exhaust pipe; and

a bracket made of the same material as the exhaust pipe, said bracket being welded to an inner circumferential surface of the exhaust pipe and coupled to the generally cylindrical case of said catalytic body by a rivet.

9. The catalytic body fixing structure according to claim 8, wherein said catalytic body has a generally cylindrical catalyst support for allowing an exhaust gas to flow

therethrough, the cylindrical catalyst support being housed in the cylindrical case and having an end disposed inwardly of an end of said cylindrical case, said bracket being coupled by the rivet to the end of the cylindrical case in a region projecting from the end of the cylindrical catalyst support.

10. The catalytic body fixing structure according to claim 8, wherein the exhaust pipe is made of titanium, and the cylindrical case and the catalyst support of the catalytic body are made of stainless steel.

11. The catalytic body fixing structure according to claim 10, wherein the bracket is made of titanium.

12. The catalytic body fixing structure according to claim 8, wherein the bracket includes a large ring fitted in a larger-diameter portion of the exhaust pipe in surrounding relation to an end of the cylindrical case, a small ring contiguous to the large ring with the end of the case being fitted in the small ring, and a plurality of circumferentially equally spaced extension arms extending from the small ring in a direction opposite to the large ring, each of said plurality of extension arms being coupled by a rivet to the cylindrical case.

13. The catalytic body fixing structure according to claim 12, wherein the larger-diameter portion of the exhaust pipe has a plurality of circumferentially spaced through holes provided therein so as to face an outer circumferential surface of the large ring, said large ring being welded to the larger diameter portion of the exhaust pipe at the through holes.

14. The catalytic body fixing structure according to claim 13, wherein a ring including a stainless mesh is spot-welded to the outer surface of the end of the cylindrical

case opposite to the bracket, the ring being interposed between the larger-diameter portion of the exhaust pipe and the end of the cylindrical case opposite to the bracket, said ring allowing the end of the cylindrical case opposite to the bracket to slide by way of thermal expansion.

15. A catalytic body fixing structure for fixing a catalytic body to an exhaust pipe the exhaust pipe for serving as part of an exhaust system of an engine, comprising:

a catalytic body having a generally cylindrical case made of a material different from the exhaust pipe and housed in the exhaust pipe; and

a bracket made of the same material as the exhaust pipe, said bracket being welded to an inner circumferential surface of the exhaust pipe and being fastened to the generally cylindrical case of said catalytic body.

16. The catalytic body fixing structure according to claim 15, wherein said catalytic body has a generally cylindrical catalyst support for allowing an exhaust gas to flow therethrough, the cylindrical catalyst support being housed in the cylindrical case and having an end disposed inwardly of an end of said cylindrical case, said bracket being fastened to the end of the cylindrical case in a region projecting from the end of the generally cylindrical catalyst support.

17. The catalytic body fixing structure according to claim 15, wherein the exhaust pipe is made of titanium, and the cylindrical case and the catalyst support of the catalytic body are made of stainless steel.

18. The catalytic body fixing structure according to claim 17, wherein the bracket is made of titanium.

19. The catalytic body fixing structure according to claim 15, wherein the bracket includes a large ring fitted in a larger-diameter portion of the exhaust pipe in surrounding relation to an end of the cylindrical case, a small ring contiguous to the large ring with the end of the case being fitted in the small ring, and a plurality of circumferentially equally spaced extension arms extending from the small ring in a direction opposite to the large ring, said plurality of extension arms being fastened to the cylindrical case.

20. The catalytic body fixing structure according to claim 19, wherein the larger-diameter portion of the exhaust pipe has a plurality of circumferentially spaced through holes provided therein so as to face an outer circumferential surface of the large ring, said large ring being welded to the larger diameter portion of the exhaust pipe at the through holes.

21. The catalytic body fixing structure according to claim 20, wherein a ring including a stainless mesh is spot-welded to the outer surface of the end of the cylindrical case opposite to the bracket, the ring being interposed between the larger-diameter portion of the exhaust pipe and the end of the cylindrical case opposite to the bracket, said ring allowing the end of the cylindrical case opposite to the bracket to slide by way of thermal expansion.